

Remarks

Claims 1-5 and 7-22 have been amended to recite a method of using a liquid crystal display. New Claim 23 has been added to reinstate the subject matter recited in previously canceled Claim 6. Thus, upon entry of this Amendment, Claims 1-5 and 7-23 are pending and under consideration.

Claims 1-2, 8-9, 14, and 22 stand rejected under 35 U.S.C. § 103(a) as being allegedly unpatentable over Paukshto *et al.* in view of Ignatov *et al.* Claims 3-5 and 12-13 stand rejected under 35 U.S.C. § 103(a) as being allegedly unpatentable over Paukshto *et al.* in view of Ignatov *et al.* and further in view of Suzuki. Claim 10 stands rejected under 35 U.S.C. § 103(a) as being allegedly unpatentable over Paukshto *et al.* in view of Ignatov *et al.* and further in view of Kurtz *et al.* Claim 11 stands rejected under 35 U.S.C. § 103(a) as being allegedly unpatentable over Paukshto *et al.* in view of Ignatov *et al.*, further in view of Kurtz *et al.* and further in view Suzuki. Claim 15 stands rejected under 35 U.S.C. § 103(a) as being allegedly unpatentable over Paukshto *et al.* in view of Ignatov *et al.*, and further in view Lazarev. Claim 16-21 stand rejected under 35 U.S.C. § 103(a) as being allegedly unpatentable over Paukshto *et al.* in view of Ignatov *et al.*, further in view of Kaneko *et al.* Applicants respectfully traverse these rejections.

Instant Claim 1 now calls for a method of using a liquid crystal display comprising a front panel comprising a front alignment layer having an alignment direction, a rear panel comprising a rear alignment layer having an alignment direction, and a liquid crystal layer between the front and rear alignment layers, wherein the liquid crystal layer has a rotational twist angle of about 90°, a pre-tilt angle of not more than 2°, the method comprising the step of setting the direction of liquid crystal directors coinciding with an off-normal viewing direction of the liquid crystal display at the mid-point of the rotational twist when a voltage is applied to the liquid crystal layer by selecting the alignment, material and thickness of the liquid crystal layer whereby a maximum image contrast is achieved in the off-normal viewing direction. As amended, Claim 1 now clearly calls for a method of using a liquid crystal display and a step of setting the direction of liquid crystal directors coinciding with an off-normal viewing direction of the liquid crystal display at the mid-point of the rotational twist when a voltage is applied to the liquid crystal layer whereby a maximum image contrast is achieved in the off-normal viewing direction.

None of the cited art teach or suggest a method of using a liquid crystal display by setting the view direction to be an off-normal direction that is different from the direction of the

normal to the liquid crystal display. In conventional liquid crystal displays, setting the viewing direction of the display to be an off-normal direction which is different from the direction of the normal to the display results in reduced visibility due to the low image contrast in the viewing direction, unnecessary diffusion of light, reflection of light, and so on. In the present invention as called for by instant Claim 1, the direction of liquid crystal directors coinciding with an off-normal viewing direction of the liquid crystal display at the mid-point of the rotational twist when a voltage is applied to the liquid crystal layer whereby a maximum image contrast is achieved in the off-normal viewing direction

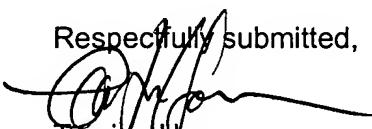
Claims 2-5 and 7-23 depend on Claim 1. They are therefore allowable for at least the same reasons as for Claim 1 and for reasons of further limitations recited therein.

Accordingly, reconsideration of the rejections of Claims 2-5 and 7-23 under 35 U.S.C. 103(a) is respectfully requested.

Conclusion

In view of the foregoing, Applicants respectfully submit that this application is now in condition for allowance. If any matters can be resolved by telephone, the Examiner is invited to call the undersigned attorney at the telephone number listed below. No fees beyond those being submitted concurrently herewith are believed due. However, the commissioner is authorized to charge any additional required fees, or credit any overpayment, to Dorsey & Whitney LLP Deposit Account No. 50-2319 (Order No. A-72195/MSS/TJH (477077-102)).

Respectfully submitted,



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